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6

~~3.~~  
17°

The method of claim <sup>15</sup>1, wherein coupling the sensors with each sensor positioned with its axis of sensitivity in a different spatial direction comprises, coupling the sensors with the axes of sensitivity in:

- a first direction;
- a second direction; and
- a third direction.

18°  
~~4.~~

1  
2

The method of claim <sup>15</sup>1, wherein rotating the sensors comprises, rotating the sensors about the x-axis, the y-axis and the z-axis.

19°  
~~5.~~

1  
2  
3

The method of claim <sup>15</sup>1, wherein measuring one or more output signals from the sensors comprises, measuring the output signals from the sensors at one or more angles of rotation.

20°  
~~8.~~

1  
2  
3

The method of claim <sup>15</sup>1, wherein processing the output signals from the sensors comprise, calculating one or more calibration coefficients from the measured output signals of the sensors.

21°  
~~7.~~

1  
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3  
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The method of claim <sup>15</sup>1, wherein each sensor further includes a corresponding ASIC having a local non-volatile memory; and wherein storing one or more calibration coefficients includes storing the corresponding calibration coefficients to the corresponding local non-volatile memories.

22°  
~~8.~~

1  
2  
3

The method of claim <sup>15</sup>1, wherein storing one or more calibration coefficients includes storing the corresponding calibration coefficients to an external database.

23°  
~~8.~~

1  
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The method of claim <sup>15</sup>1, wherein coupling, rotating, measuring, and processing are provided in accordance with the Institute of Electrical and Electronic Engineers Specification IEEE 337-1972 for the IEEE Standard Specification Format Guide and Test Procedure for Linear, Single-Axis, Pendulous, Analog Torque Balance Accelerometer.

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1 24. 40.

The method of claim 1, wherein the seismic sensor further comprises a proof mass, the method further comprising controlling the position of the proof mass at two or more locations using an electronic signal.

1 25. 11.

The method of claim 10 further comprising correcting seismic sensor non-linear characteristics using the positioning of the proof mass.

1 26. 42.

The method of claim 11 further comprising determining a proof mass control setting indicative of the mass position for correcting the non-linear characteristics and storing the control setting.

1 27. 43.


The method of claim 12, wherein the seismic sensor further comprises a proof mass, the method further comprising controlling the position of the proof mass at two or more locations using an electronic signal and measuring the position of the proof mass at two or more positions.

1 28. 14.

The method of claim 13, wherein the seismic sensor further comprises a proof mass, the method further comprising controlling the position of the proof mass at two or more locations using an electronic signal, determining a proof mass control setting indicative of a mass position for correcting seismic sensor non-linear characteristics, and storing the control setting.

Respectfully submitted,

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